

Attachment 1

Core Team's Response to Reviewers' Comments

Thanks to everyone who commented on the draft NWRS Inventory and Monitoring Program (I&M Program) documents. We appreciate all of the time and effort each person put into this endeavor. Responses to most comments have been incorporated into the final drafts of the NWRS I&M Program's Strategic Plan, Operational Blueprint, and Business Rules. However, we could not address all of the changes requested because certain decisions were made early on by the NWRS Leadership in order to move forward with designing the program. These decisions are described in the comments that follow. The following paragraphs summarize our responses to each of the major categories of comments.

Defining the role of the I&M Program as compared to Refuge Operations and concerns about increased burden on refuge staffs: The Core Team and the Executive Oversight Committee agreed that inventories and monitoring should be integrated with Refuge Operations as much as possible, not created as a stand-alone program. This is necessary if the I&M Program is to be relevant and responsive to field-level needs. The organizational structure of the I&M Program reflects that philosophy. Relationships between the NWRS I&M Program and individual refuges will evolve as the program is implemented nationally and regionally. The intent is for refuge staff to participate in I&M Program tasks when there is capacity and willingness to do so. When the I&M tasks are not integral to refuge operations or require specialized skills not generally available among refuge staff, other mechanisms (contractors, term employees) will be used to obtain field data. We anticipate that the level of participation of refuge staff will vary among refuges. We recognize that many more field positions may be needed to make the NWRS I&M Program successful as it evolves.

During the strategic planning process, the Core Team and the Executive Oversight Committee determined the highest priority national inventory and monitoring issues to be tackled by the national NWRS I&M Program in the near future (the first 2 years of the program). These issues (e.g., invasive species, water assessments) are highlighted in the Operational Blueprint. We chose issues that are important to many refuges and that support some of their inventory and monitoring needs. The national I&M program will always have to select and prioritize from national, regional, LCC-level, and Station-level needs. The NWRS I&M Program will not be able to meet all of the monitoring needs of individual refuges. Refuges will still need to collect information to support and inform their day-to-day refuge operations as they have in the past.

Goals and objectives: The Core Team and Executive Oversight Committee created goals and then, in a separate process, selected high priority inventory and monitoring issues. For these issues, we later created objectives, many of which fit into multiple goals. The Core Team determined that we did not have enough time or participation from the field to be able to develop

specific, measurable objectives that nested neatly into our goals. Future national and regional staff will work with Refuge Chiefs and others from the field to refine and prioritize long-term goals, SMART objectives, and action items within each objective with a timeline for accomplishments. The results will be inventory and monitoring objectives that are designed to provide input for the NWRS decision-making process.

Collaboration with external and internal partners: The NWRS National I&M Program will integrate with NPS's Vital Sign Inventory and Monitoring Program and US Forest Service's Inventory and Analysis Program and other national programs to the extent that is possible, given our goals and objectives. Several Core Team members have discussed potential collaboration with many of the national and regional leaders of these programs. The NWRS I&M Program will also work collaboratively with other Service programs to tap into existing expertise and identify common needs. We will avoid duplication of efforts. The future I&M staff will continue discussing and integrating complementary programs.

Priority topics and monitoring protocols: During the development of these documents, the Core Team focused on biotic and abiotic resources. We did not address historic, visual/aesthetic, or cultural issues in our plans unless they were intimately related to a biological issue. NWRS leadership approved the list of priority issues addressed in the Operational Blueprint. We limited our discussion of monitoring protocols to the priority issues that we selected for the first two years (see Operational Blueprint). Other issues and associated protocols will be considered by the national and regional staff in future years. We recommend using legacy data, when appropriate, as baseline information.

Too much detail and not enough detail: The I&M Core Team included the level of detail regarding inventory and monitoring approaches and implementation of the program that they and the Executive Oversight Committee thought was appropriate for these documents at this time. The future staff of the I&M program will determine what level is appropriate for future strategic plans. They will also develop detailed study plans and approaches for each pilot project.

Redundancy: The Core Team created the Strategic Plan, Operational Blueprint, and Business Rules as stand-alone documents. Therefore, we will retain the level of redundancy that doing this requires.

Climate change and other stressors: Funding for the I&M program was appropriated with specific Congressional intent to inform adaptation strategies to climate change. The national I&M program will be focused on providing critical information regarding the vulnerability of NWRS's species and habitats to climate change and other stressors. To meet data needs regarding these stressors, individual refuges may be asked to participate in certain surveys, based upon their location in the landscape.

Water issues: To look for potential climate change effects on Refuge water resources, the Water Resource Inventories and Assessments (WRIAs) will examine long-term trends in

precipitation and stream flow from stations that have minimal direct anthropogenic influences. The WRIAs will include “threats” and “needs” categories that should address concerns over allocation issues. The term “HGM” as used in the I&M Program documents refers to an analysis tool in a management context and differs from the related “HGM Approach” used to assess and classify wetland function in a regulatory framework. This has been clarified in the Operational Blueprint and the Strategic Plan. Data collected within the inventory and assessment process will help us meet the water resource mandates described in the Improvement Act.

Data management: The national I&M program will collaborate with other large monitoring databases, as appropriate, considering our goals and objectives and keeping in mind the need for data security as well as flexibility, timeliness, and ease of use at the field level. We will consider efficient ways to share data with others. The Fort Collins staff will also design the new national databases with knowledge of current FWS regional databases and consider possible incorporation. The Fort Collins staff will also communicate, coordinate, and collaborate internally and externally to prevent duplicative infrastructures and to ensure data sharing capabilities are incorporated. Data management represents a necessary and significant investment for the success of the program and should not be viewed as additional bureaucracy.

GIS: The Core Team and Executive Oversight Committee recognized the vital importance of GIS technology to I&M efforts and have recommended hiring GIS staff at national and regional levels. The national Supervisory GIS Specialist (see national office organizational chart) will have the lead in addressing nationwide GIS needs that relate to I&M. The GIS Supervisor will also be expected to actively participate on the FWS GIS Steering Committee ensuring integration, efficiency, and collaboration across the Service.

I&M Program costs: The I&M program is being developed with knowledge of the uncertainty of funding that comes with new initiatives and the Federal budget process. The program is scalable; the highest priority needs will be addressed commensurate with available funding. The I&M program represents a necessary investment by the Refuge System to enhance scientific capacity, meet the mandates of the National Wildlife Refuge System Improvement Act of 1997, and address new and evolving resource management challenges.

Geographic areas: Comments received regarding the Service’s Geographic Framework are noted. However, the Framework is a Service-USGS product and not a product of the Inventory and Monitoring effort or the Refuge System leadership.